

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

**1. (currently amended):** A stimuable phosphor sheet comprising:  
a stimuable phosphor layer containing a europium-activated cesium bromide based stimuable phosphor as a main ingredient, said stimuable phosphor layer being formed by a vacuum film forming technique; and  
a substrate supporting said stimuable phosphor layer;  
a reflective film formed between said substrate and said stimuable phosphor layer, said reflective film for improving efficiency of emergence of stimulated light emission; and  
a barrier film formed between said reflective film and said stimuable phosphor layer,  
said barrier film for preventing oxidation of said reflective film,  
wherein a maximum intensity of emission that is generated in a wavelength range of 490-510 nm when said stimuable phosphor layer is exposed to electron beams is lower than a maximum intensity of the emission generated in a wavelength range of 440-460 nm.

**2. (currently amended):** The stimuable phosphor sheet according to claim 1, further comprising: ~~wherein a said reflective film formed between said substrate and said stimuable phosphor layer, said reflective film for improving efficiency of emergence of stimulated light~~

emission is a thin film made of one of Al, Al alloys, Ag and Ag alloys, and a film thickness of said reflective film ranges from 0.01  $\mu\text{m}$  to 5  $\mu\text{m}$ .

**3. (currently amended):** The A stimuable phosphor sheet according to claim 2,  
comprising:

a stimuable phosphor layer containing a europium-activated cesium bromide based  
stimuable phosphor as a main ingredient, said stimuable phosphor layer being formed by a  
vacuum film forming technique;

a substrate supporting said stimuable phosphor layer; and  
a reflective film formed between said substrate and said stimuable phosphor layer, said  
reflective film for improving efficiency of emergence of stimulated light emission,

wherein a maximum intensity of emission that is generated in a wavelength range of  
490-510 nm when said stimuable phosphor layer is exposed to electron beams is lower than a  
maximum intensity of the emission generated in a wavelength range of 440-460 nm,

wherein said reflective film is a thin film made of one of Al, Al alloys, Ag and Ag alloys,  
and a film thickness of said reflective film ranges from 0.01  $\mu\text{m}$  to 5  $\mu\text{m}$ .

**4. (canceled).**

**5. (currently amended):** The stimuable phosphor sheet according to claim [[4]] 1,  
wherein said barrier film is a thin film made of one of silicon oxides, titanium oxides, silicon

nitrides, cerium oxides and magnesium fluorides, and a film thickness of said barrier film ranges from 0.01  $\mu\text{m}$  to 5  $\mu\text{m}$ .

**6. (canceled).**

**7. (currently amended):** ~~The~~ A stimuable phosphor sheet according to claim 6, comprising:

a stimuable phosphor layer containing a europium-activated cesium bromide based stimuable phosphor as a main ingredient, said stimuable phosphor layer being formed by a vacuum film forming technique;

a substrate supporting said stimuable phosphor layer; and  
a barrier film formed on said stimuable phosphor layer, said barrier film for preventing oxidation of said stimuable phosphor layer.

wherein a maximum intensity of emission that is generated in a wavelength range of 490-510 nm when said stimuable phosphor layer is exposed to electron beams is lower than a maximum intensity of the emission generated in a wavelength range of 449-460 nm.

wherein said barrier film is a thin film made of one of silicon oxides, titanium oxides, silicon nitrides, silicon oxynitrides, cerium oxides and magnesium fluorides, and a film thickness of said barrier film ranges from 0.01  $\mu\text{m}$  to 5  $\mu\text{m}$ .

**8. (original):** The stimuable phosphor sheet according to claim 1, wherein said stimuable phosphor layer is a layer containing as said main ingredient a cesium bromide based stimuable phosphor using europium as an activator, and a molarity ratio between said activator and said cesium bromide based stimuable ranges from 0.0005:1 to 0.01:1.

**9. (original):** The stimuable phosphor sheet according to claim 1, wherein a film thickness of said stimuable phosphor layer ranges from 50  $\mu\text{m}$  to 1000  $\mu\text{m}$ .

**10. (original):** The stimuable phosphor sheet according to claim 1, wherein said maximum intensity of the emission generated in the wavelength range of 490-510 nm is equal to or lower than 70% of said maximum intensity of the emission generated in the wavelength range of 440-460 nm.

**11. (original):** The stimuable phosphor sheet according to claim 1, wherein said maximum intensity of the emission generated in the wavelength range of 490-510 nm is equal to or lower than 50% of said maximum intensity of the emission generated in the wavelength range of 440-460 nm.

**12.-14. (canceled)**

**15. (previously presented):** A method of producing stimuable phosphor sheet which comprises: a stimuable phosphor layer containing a europium-activated cesium bromide based stimuable phosphor as a main ingredient, said stimuable phosphor layer being formed by a vacuum film forming technique; and a substrate supporting said stimuable phosphor layer, wherein a maximum intensity of emission that is generated in a wavelength range of 490-510 nm when said stimuable phosphor layer is exposed to electron beams is lower than a maximum intensity of the emission generated in a wavelength range of 440-460 nm, said method comprising:

- a step of preparing said substrate in a film forming system;
- a step of evaporating both of europium and cesium bromide by using a resistance heating in said film forming system;
- a step of performing evaporation under an evaporation atmosphere in a range of 0.01-3Pa to form said stimuable phosphor layer in said film forming system;
- a step of heating said substrate during said evaporation; and
- a step of annealing said stimuable phosphor layer after it was formed on said substrate, wherein a heating temperature for heating said substrate is in a range of 120-250°C and a heating temperature for annealing said stimuable phosphor layer is in a range of 150-250°C.